

BEFORE THE OFFICE OF THE COMMISSIONER OF RAILROADS

STATE OF WISCONSIN

On the Commissioner's Own Motion for a Determination of the Adequacy of Warning Devices at the Grade Crossing of the Wisconsin Central Ltd. Tracks with CTH 'B' in the Town of Hawthorne, Douglas County

9164-RX-591

FINDINGS OF FACT AND ORDER

On March 3, 2005, the Commissioner of Railroads directed the staff of the Office of the Commissioner of Railroads (OCR) to investigate the adequacy of warning devices under §195.28, Stats., at the grade crossing of the Wisconsin Central Ltd. (WCL) tracks with CTH 'B' in the Town of Hawthorne, Douglas County (Crossing No. 186 107S).

An OCR investigator inspected the crossings in May 2006. No hearing was held.

Findings of Fact

THE COMMISSIONER FINDS:

CTH 'B' is about 23' wide in the vicinity of the crossing and intersects the railroad tracks at an angle of about 40° (right-hand forward). The roadway approaches to the crossing are nearly level from the east and about 3% descending to the crossing from the west. CTH 'B' carried an average daily traffic (ADT) of 1400 according to 2002 DOT records at a legal speed limit of 35 mph.

The WCL operates 15 train movements per day over the crossing at a timetable speed of 50 mph. The crossing consists of one mainline track. CTH 'B' crosses a siding about 180' east of the mainline track. The sidetrack crossing has its own mast-mounted automatic flashing lights and the mainline track crossing has cantilevered automatic flashing lights. This order only addresses the mainline crossing.

The exposure factor at this crossing is 21,000. The exposure factor equals the product of the number of trains per day and the number of highway vehicles per day, which yields a numerical value for the potential conflicts each day at the crossing.

Four train-vehicle accidents have occurred at this crossing since 1973. The accidents occurred in 1976 and 1995 (3). An accident on January 10, 1995 cause two fatalities and three injuries.

Accidents that do occur here will likely be quite serious if a through train is involved due to their 50 mph speed. Train speed is strongly correlated with fatalities in train/vehicle accidents. More specifically, crossings with train speeds of 40 mph and over have a disproportionate number of fatalities. According to Federal Railroad Administration (FRA) statistics, nationally, in 1994 71% of fatalities occurred at crossings with train speeds of 40 mph+, even though only 26% of all crossings had train speeds of 40 mph+.

The crossing is presently protected with cantilevered 12" incandescent automatic flashing lights. The existing warning devices are inadequate. The existing warning devices will be adequate until such time as the new warning devices are installed. In order to adequately protect public safety cantilevered 12" LED automatic flashing lights with gates and constant warning time circuitry are needed. The gates, constant warning time circuitry, and LED lamps should be added to the existing signals to the extent feasible.

Constant warning time circuitry adjusts for train speed and causes the crossing signals to always operate for the same amount of time before the train reaches the crossing, regardless of train speed. A motion detector simply detects the train operation, but does not adjust for train speed so that the amount of warning time varies based on train speed.

Light emitting diodes (LED) lamps replace incandescent bulbs. LEDs have higher conspicuity, a wider cone of vision, and longer life than incandescent lights. LEDs are especially useful on east-west roadways where the rising and setting sun may make the signals difficult to see.

Source of funding: The signal materials and installation shall be paid from OCR safety funds.

Conclusion on the Issue

THE COMMISSIONER CONCLUDES:

That in order to adequately protect and promote public safety, it is necessary to install and maintain cantilevered 12" LED automatic flashing lights with gates and constant warning time circuitry at the crossing of the tracks of the Wisconsin Central Ltd. with CTH 'B' in the Town of Hawthorne, Douglas County.

Conclusion of Law

THE COMMISSIONER CONCLUDES:

That the jurisdiction of the Office of the Commissioner of Railroads under §195.28, Stats., extends to this matter. Accordingly, the Office enters an order consistent with the findings of fact.

Order

THE COMMISSIONER ORDERS:

1. That the **Wisconsin Central Ltd.** shall install and maintain 12" LED lamps, gates, and constant warning time circuitry on the **existing cantilevered signals** with appropriate appurtenances in accordance with such plans as are filed with and approved by the Office of the Commissioner of Railroads at the crossing of its tracks with CTH 'B' at-grade in the Town of Hawthorne, Douglas County by **December 31, 2007** (Crossing No. 186 107S / MP 439.82).

2. That the **Wisconsin Central Ltd.** shall submit to the Office of the Commissioner of Railroads signal and circuit plans with the cost estimate of its proposed installation and upon completion of the signal project, a detailed statement of the actual cost to the Office and to the Wisconsin Department of Transportation.

3. That the signal installation work herein ordered shall not begin until the district office of the Wisconsin Department of Transportation informs the railroad that they may start such work and such start notice will not be issued until appropriate federal aid or other funding arrangements have been assured. The cost of the new project initiated before the start notice will not be reimbursed with public funds and shall be the responsibility of the railroad.

4. That to the extent feasible the **Wisconsin Central Ltd.** shall re-use the existing signal equipment.

5. That the **Wisconsin Central Ltd.** shall bear no part of the cost of the crossing signals installation, except for any cost assessed to the railroad pursuant to §195.60, Stats., for the investigation of this matter by the Office. The railroad shall not pass on those assessment costs either directly or indirectly.

6. That if the petitioner, railroad or any interested party objects to this order and requests a hearing within 20 days of the date of this order in writing, the Office will hold a public hearing.

7. That jurisdiction is retained.

Dated at Madison, Wisconsin, (May 24, 2006).

By the Office of the Commissioner of Railroads.

Rodney W. Kreunen
Commissioner of Railroads

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